

Dear Kees Jan van Groenigen,

Thank you very much for your reply and your positive feedback. We are happy to address your comment and added the text from the answer to reviewer 2 into the main text.

In line 304 we added the info that the snowmelt started on 14 May:

Most likely, we do not cover the complete melting season with our study period; we clearly see in the data of outgoing short wave radiation that the snowmelt started 14 May.

And in line 317 we added the new paragraph on the relevance of DOC and DIC fluxes during the snowmelt period:

In case we would include the lateral C fluxes between 14 May and 2 June and assume that the DOC flux at our site would show a similar pattern as the DOC flux in Olefeldt and Roulet, 2012 (74% of DOC flux during snowmelt), we would have a max. annual DOC flux of 0.21 g m^{-2} . From DIC flux we would only expect a low contribution during the snow melt due to likely high water discharge rates during the snowmelt and the negative correlation between DIC concentration and water discharge rate. Therefore, the inclusion of possible snowmelt-DOC flux and DIC flux would change the absolute numbers of these fluxes, however, likely not change our conclusion regarding the influence of DOC flux or DIC flux on the NECB.

We hope that this change in combination with the other previously changes in the review process are satisfactory.

Best regards,

Lutz Beckebanze